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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,295	07/14/2003	Michael Lee	NKTZ 2 00061	6308
7590	11/19/2004		EXAMINER	
Scott A. McCollister, Esq. Fay, Sharpe, Fagan, Minnich & McKee, LLP 7th Floor 1100 Superior Avenue Cleveland, OH 44114-2518			BLAU, STEPHEN LUTHER	
			ART UNIT	PAPER NUMBER
			3711	
DATE MAILED: 11/19/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

48

**Office Action Summary**

Application No.

10/619,295

Applicant(s)

LEE, MICHAEL

Examiner

Stephen L. Blau

Art Unit

3711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 August 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 6,7,9,10,14 and 16-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6,7,9,10,14 and 16-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 9 recites the limitation "the elastomer" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

3. The change to claim 19 is agreed with and the rejection under 35 U.S.C. 112, second paragraph, is removed.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 14, 16-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imamoto in view of Official Notice.

Imamoto discloses a muscle back iron having head with a face, a back, a back having an upper portion substantially parallel to a face in the form of the back of the face plate (40) in the upper portion of the head (Fig. 1(b)), a back having an extra mass portion positioned toward the bottom of the head wherein the extra mass portion defines a cavity therein and a cavity entirely enclosed by the head (Fig. 1(b)), a elastomer being disposed in the cavity (Ref. No. 30, (0038)), a substantially portion of the extra mass portion being positioned below a cavity, and the cavity has a width in cross-section being slightly less than a width of a head in the form near the bottom of the cavity (Fig. 1(b)).

The examiner takes Official Notice that it is well known to one skilled in the art have a club having a shaft attached to a head in order to increase the velocity of a head at impact.

6. Claims 6-7, 10, 20, 22-24, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada in view of Rife.

Yamada discloses a surface being near a top edge and substantially parallel to a front surface (Figs. 2 and 6), a cavity not visible from an exterior of a club (Figs. 2-3), a cavity vertically spaced from a sole (Fig. 2), a muscle back portion covering at least half of the vertical height of a rear surface (Fig. 2), and an insert filled with foamed synthetic resin (Col. 4, Lns. 41-43).

Yamada lacks an upper surface as shown in figures 2 and 6 being the same across the length of a head forming a blade, muscle back surface having an upper ledge that generally follows the contour of the top edge and a muscle back portion covering at least half of the surface area of the rear surface.

Rife discloses a muscle back surface having an upper ledge that generally follows the contour of the top edge (Figs. 9, 14), a muscle back portion covering at least half of the surface area of the rear surface (Fig. 14) and an upper surface being the same across the length of a head forming a blade (Fig. 9). In view of the reference of Rife it would have been obvious to modify the head of Yamada to have an upper surface as shown in figures 2 and 6 being the same across the length of a head in order to simplify the manufacturing process of a head by making the upper section the same across the length of a head. In view of the reference of Rife it would have been obvious to modify the head of Yamada to have a muscle back surface having an upper ledge that generally follows the contour of the top edge in order to have a profile of a muscle back portion in a lower portion of a head which is used in the art. In view of the reference of Rife it would have been obvious to modify the head of Yamada to have a muscle back portion covering at least half of the surface area of the rear surface in order to maximize that amount of weight added behind a face to maximize the amount of energy transferred to a ball at impact.

7. Claims 14, 18, 21 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada in view of Rife as applied to claims 6-7, 10, 20, 22-24, and 26 above, and further in view of Motomiya.

Yamada discloses a cavity filled with foam synthetic resin (Col. 4, Lns. 41-43) and a head formed of metal (Col. 3, Lns. 1-9) and fiber with synthetic resin (Col. 3, Lns. 9-20).

Yamada lacks a high rebound elastomer filling a cavity and a head attached to a shaft. Motomiya discloses filling a sealed space with an elastic filler material such as foamed urethane and rubber (Col. 2, Lns. 14-16) and a shaft attached to a head (Fig. 3). In view of the patent of Motomiya it would have been obvious to modify the head of Yamada to have a high rebound elastomer filling a cavity in the form of a synthetic foam being urethane and rubber in order to provide vibration dampening to a head at impact. In view of the patent of Motomiya it would have been obvious to modify the head of Yamada to have a head attached to a shaft in order to increase the velocity of a head at impact.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada in view of Rife as applied to claims 6-7, 10, 20, 22-24, and 26 above, and further in view of Motomiya and Viollaz.

Yamada discloses a cavity filled with foam synthetic resin (Col. 4, Lns. 41-43).

Yamada lacks a polyurethane elastomer. Motomiya discloses filling a sealed space with an elastic filler material such as foamed urethane and rubber (Col. 2, Lns.

14-16). Viollaz discloses a cavity filled with a foamed urethane in the form of polyurethane (Col. 2, Lns. 46-50). In view of the patent of Motomiya it would have been obvious to modify the head of Yamada to have a high rebound elastomer filling a cavity in the form of a synthetic foam being urethane and rubber in order to provide vibration dampening to a head at impact. In view of the patent of Viollaz it would have been obvious to modify the head of Yamada to have the cavity filled with polyurethane in order to utilize a foamed urethane used in the market place.

### ***Reissue Applications***

9. The argument that it is improper to combine the references of Rife with Yamada since Rife shows no embodiment of a cavity not visible is disagreed with. The examiner agrees that it would not be obvious to modify Rife to have a cavity not visible. But the examiner believes it would be obvious to modify Yamada with a top section as shown in figures 2 and 6 to be the same cross section along the length of a head as Rife disclose. Yamada clearly will have a cross section along the length of a head and clearly the one shown in figures 2 and 6 would be an obvious selection. As such the top section would have blade. The argument Yamada fails to disclose a back surface being substantially parallel to the front surface is disagreed with. Figures 2 and 6 clearly show a back surface near the top edge being substantially parallel to a front surface. The top of figures 2 and 6 of Yamada are very close to the top surface as shown in figure 5 of this application.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

### **Conclusion**

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Blau whose telephone number is (571) 272-4406. The examiner is available Monday through Friday from 8 a.m. to 4:30 p.m.. If the examiner is unavailable you can contact his supervisor Greg Vidovich whose telephone number is (571) 272-4415.

slb/ 17 November 2004

  
**STEPHEN BLAU**  
**PRIMARY EXAMINER**